

Quick Start Supplement

AST
RESEARCH INC.





READ THIS FIRST

ENHANCED AST 5251/11 PLUS™

QUICK START

March 1988
000755-001 A

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First Edition (March 1988)

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ENHANCED AST-5251/11 PLUS QUICK START

Where do I start? The answer to this question depends on your level of expertise. Your terminal emulation program comes with a variety of reference material. The first section of this supplement shows you the best route to take in setting up your reference material, determining your level of expertise, and getting started.

What Types of Information Do Your Manuals Contain?

Enhanced AST-5251/11 Plus Quick Start Supplement: Contains instructions on using your Enhanced AST-5251/11 Plus terminal emulation program Quick Start Configurator. Also included are:

- Quick installation, configuration, and operational procedures for your Enhanced AST-5251/11 Plus.
- Slave cluster or slave gateway Quick Start configuration.

Unless you need to make major changes to the terminal emulation program default settings, which is usually not necessary, the Quick Start Configurator is the most efficient way to get your system up and running.

NOTE

For detailed information on slave cluster software configuration and hardware setup, refer to the *AST-5250/Cluster User's Manual*.

For detailed information on slave gateway software configuration and hardware setup, refer to the *AST-5250/Gateway User's Manual*.

AST-5250/Emulation Program Base Manual: Contains technical reference material for the cluster, gateway and, remote and local terminal emulation. The following items are discussed in detail:

- General System Overview.
- Operation During Emulation.
- File Transfer Information.
- Customizing your AUTOEXEC.BAT File.
- Keyboard Mapping and Functions.
- EBCDIC to ASCII Conversion.
- Key Layout and Scan Codes.
- Alternate Character Sets.
- Complete Table and Figure Illustrations.

User's Manual: Contains complete instructions on how to run the full configuration program and begin emulation. Also included are:

- Features.
- Compatibility and System Requirements.
- What you Need to Know Before you Start.
- Hardware and Software Installation.
- Hardware and Software Full Configuration Program.
- Error Messages.
- Complete Table and Figure Illustrations.

NOTE

The Quick Start Configurator gets your system up and running much quicker than the full configuration program.

What is Your Level of Expertise?

Our users are on different levels technically, and have individual needs that vary depending on the level of expertise. What type of user are you? Once you define your level of expertise, you can easily determine where to go for the information you need. Refer to the following descriptions.

Novice

You know little or nothing about computers and DOS (disk operating system) is a foreign word. Before going any further:

- Learn the fundamentals of DOS.
- Review the *DOS Manual* to familiarize yourself with basic command line procedures.
- Make sure that your *DOS Manual* is readily available at all times. Once you are a bit more comfortable with DOS, you can advance to the next level of expertise.

Novice 5250 User

You are familiar with DOS but know little or nothing about 5250 terminal emulation. Before going any further:

- Make sure you have your *DOS Manual* and *AST-5250/Emulation Program Base Manual* nearby for reference.
- Review Introducing the AST-5250 Emulation Program and the General System Overview sections of the *AST-5250/Emulation Program Base Manual*.
- Study your *Enhanced AST-5251/11 Plus User's Manual*.
- Follow the steps provided in this supplement to set up your system and begin emulation.

Intermediate 5250 User

You are familiar with DOS and 5250 terminal emulation.

- Make sure you have your *DOS Manual* and *AST-5250/Emulation Program Base Manual* nearby for reference.
- Begin by using the *Quick Start Supplement* to run the Quick Start Configuration program, or your *Enhanced AST-5251/11 Plus User's Manual* to run the Full Configuration program.

Experienced 5250 User

You are familiar with DOS and have worked with the AST 5250 terminal emulation program many times.

- Determine your needs based on your project.
- Start with the *User's Manual* and any additional *Enhancement Supplements* for a quick review of new features.
- Proceed with the *Quick Start* or the *User's Manual* to run the configuration program and begin emulation.
- Make sure you have your *Base Manual* nearby for quick reference. You are experienced, but who knows when a question will arise.

HARDWARE INSTALLATION

Your Enhanced AST-5251/11 Plus twinax adapter board (TAB) comes factory configured. You may need to change this configuration based on your host system or personal computer (PC) configuration. Verify with your host system administrator that the default settings for the following items do not conflict with your host system or PC.

- Interrupt request level (IRQ) setting = 2
- Input/output (I/O) address range = 0250h to 0257h
- Terminator toggle switch position = Up (last device on the twinax cable line)

NOTE

If you change the default IRQ or I/O address, you must modify these settings using the full configuration program (refer to your *Enhanced AST-5251/11 Plus User's Manual*) to reflect these changes.

Follow the steps in this section to install your TAB in your PC and connect to the host system.

For detailed information on hardware configuration, default settings, installation, and cabling, refer to the *Enhanced AST-5251/11 Plus User's Manual*.

STEP 1

Determine if your PC is the last device on the twinax cable:

Contact your host system administrator to determine if your PC is the last device on the twinax cable line.

If your PC is not the last device on the cable, move the toggle switch to the down position.

If your PC is the last device on the cable, make sure the toggle switch on your TAB is in the up position (the default setting).

STEP 2

Disconnect your PC: Make sure your system is off, and the power cord is unplugged.

STEP 3

Remove the PC cover: Unscrew the cover mounting screws and pull the cover off gently.

STEP 4

Select an open expansion slot: Locate the expansion slots on the left side of your system (with the front of your system facing you).

STEP 5

Remove expansion slot cover: Identify the metal cover for the cut-out located in the back panel of your system chassis.

Unscrew the bracket retaining screw and remove the expansion slot cover. Retain the screw for use in Step 8.

STEP 6

Install the card guide: Determine whether or not your PC has a card guide for the expansion slot you want to use. If it does, go to Step 7. If it does not, install the card guide that came with your TAB.

STEP 7

Install the TAB: Discharge any static electricity by touching a grounded surface before handling your TAB.

Align the edge of your TAB into the card guide. Push the TAB straight down, using evenly distributed pressure, until it is secure.

STEP 8

Secure the TAB: Use the bracket retaining screw you removed in Step 5 to secure the TAB. Tighten the bracket retaining screw until it is secure.

STEP 9

Replace the cover: Slide the cover from the front until it stops securely against the rear panel.

Reinstall the cover mounting screws.

STEP 10

Install cables: Reattach any other cables and connectors you have removed. Be sure your keyboard and monitor connectors are plugged in. Replace the power cord to the system unit.

Go to the next section.

Connecting to the Host System

STEP 1

Connect the stub cable to the TAB: Match the long row of pins with the long row of openings in the receiving D-shell connector. The 12-inch stub cable's DA15P (male) connector fits into the DA15S (female) connector on the rear panel only one way.

Push the cable connector firmly into the rear panel connector.

STEP 2

Secure the connection: Tighten the mounting screws on the cable connector to secure the connection.

NOTE

Your host system administrator should attach any additional twinax cable necessary to bring the line within the reach of your PC.

STEP 3

Connect the T-connector to the end of the stub cable assembly attached to your TAB (in your PC): Insert the middle threaded leg (socket) of the T-connector into the keyed plug body of the stub cable connector. Turn the plug body to tighten the connection.

STEP 4

Connect the twinax cable: Insert either side of the T-connector into the keyed plug body of the twinax cable, connecting your PC to the unit on the line above yours. Turn the plug body to tighten the connection. If you are the last device on the line, your connection is complete. Make sure the toggle switch on your TAB is in the up position.

If your PC is not the last device on the line, connect the twinax cable from the unit below your PC to the other side of the T-connector. Make sure the toggle switch on your TAB is in the down position.

Proceed to the next section to install your software.

SOFTWARE INSTALLATION

The following sections discuss emulation software installation procedures for both fixed and floppy disk operation.

If you are planning to run the emulation program from floppy disk, skip "Fixed Disk Installation" and go to "Floppy Disk Installation".

Fixed Disk Installation

Follow the steps below to create your emulation software directory and install your files.

Creating Your Emulation Software Directory

STEP 1

Boot your system: Boot from either your fixed disk or DOS floppy disk.

STEP 2

Make sure you are in the root directory of your fixed disk: Type the following commands at the DOS prompt:

drive1: <Enter>

CD\ <Enter>

drive1 represents your fixed disk drive location (usually drive C).

STEP 3

Create your emulation software directory: Type the following command at the DOS prompt to create your directory:

MD *directory name* < **Enter** >

directory name represents any name you specify with a maximum of eight characters.

NOTE

You must be in *directory name* to use the Quick Start Configurator or the Full Configuration program. You must also be in *directory name* to begin emulation.

STEP 4

Change directories: Type the following command at the DOS prompt to work from your emulation software directory:

CD *directory name* < **Enter** >

STEP 5

Copy your emulation software master floppy disk: Insert your emulation software floppy disk 1 of 2 into your disk drive. Enter the following command at the DOS prompt:

COPY *drive1:*. * drive2:* < **Enter** >

drive1 represents the location of your source disk.
drive2 represents the location of your target disk.

Remove disk 1 of 2.

Repeat Step 5 to copy disk 2 of 2.

STEP 6

Create KBD keyboard files subdirectory: Type the following command at the DOS prompt:

MD KBD <Enter>

STEP 7

Change directories: Type the following command at the DOS prompt:

CD KBD <Enter>

STEP 8

Copy keyboard files: Type the following command at the DOS prompt:

COPY drive1:KBD drive2:<Enter>

STEP 9

Store the master floppy disks: Remove your emulation software master floppy disk from your disk drive. Put your master floppy disks away for safe keeping.

STEP 10

Return to directory name: Type the following command at the DOS prompt to return to your emulation software directory (*directory name*):

CD..<Enter>

If you do not want to make backup copies of your emulation software master floppies, you can skip the next section and go to "Configuration".

Floppy Disk Installation

If you are operating your emulation software from floppy disk, refer to the following sections for instructions on making backup copies of your emulation software master floppy disks.

Making an Emulation Software Backup Floppy Disk

Follow the steps in this section to make your backup floppy disks. You need two blank floppy disks on which to make the backups.

STEP 1

Boot your system: Boot from either your fixed disk or DOS floppy disk.

STEP 2

Copy your emulation software master floppy disk: Insert your emulation software floppy disk 1 of 2 into your disk drive. Copy the contents of the master floppy disk to the blank floppy disk using the DOS DISKCOPY command (refer to your *DOS Manual* if you have questions about the DISKCOPY command). Enter the following command at the DOS prompt and follow the instructions as they appear on your screen:

DISKCOPY *drive1:* *drive2:* <Enter>

drive1 represents the location of your source floppy disk.
drive2 represents the location of your target floppy disk.

NOTE

If your PC has only one disk drive, you must still enter the DISKCOPY command in the format shown in Step 2. DOS prompts you on when to insert your source and target floppy disks.

Repeat Step 2 to copy disk 2 of 2.

STEP 3

Store the master floppy disks: Remove your emulation software master floppy disk from your disk drive. Put your master floppy disks away for safe keeping. Use your backup copies as your working floppy disks.

Go to the next section.

CONFIGURATION

The Quick Start Configurator creates and edits the standard configuration file (AST5251.CFG) to adapt to your system configuration. The emulation program, invoked by the batch file (AST5251.BAT) reads AST5251.CFG.

For further information on software configuration refer to the *Enhanced AST-5251/11 Plus User's Manual*.

Using the Quick Start Configurator

Before you begin, make sure you are in your emulation software directory (*directory name*).

Follow these steps to run the Quick Start configurator:

STEP 1

Start the program: Enter the appropriate command at the DOS prompt (if you are running the program from floppy disk, insert disk 2 of 2):

For AST-5251/11 Plus:

CFG5251 /Q <Enter>

For master cluster:

CFG5251 /C /Q <Enter>

For master gateway:

CFG5251 /G /Q <Enter>

For slave cluster:

CFG5251S /Q <Enter>

For slave gateway:

CFG5251G /Q <Enter>

Figure 1, the AST-5250 Quick Start Configurator menu appears:

AST-5250 Quick Start Configurator
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Current Configuration

PC Display Type : Monochrome
Keyboard Type : USA
Window Address : D000
Station Address 0: 5251/11 Display
Station Address 1: Not Used
Station Address 2: Not Used
Station Address 3: Not Used
Station Address 4: Not Used
Station Address 5: Not Used
Station Address 6: Not Used

Exit Program

Figure 1. AST-5250 Quick Start Configurator Menu.

Cursor Control

- Press < **Up Arrow** > and < **Down Arrow** > to select your options. For example, pressing < **Down Arrow** > once from *PC Display Type* selects *Keyboard Type*.
- Press < **Left Arrow** > or < **Right Arrow** > to change the value of the selected option. If you continue pressing < **Left Arrow** > or < **Right Arrow** > the configuration program wraps around to the first choice.
- Press < **Down Arrow** > to select *Exit Program* and press < **Enter** >. You can also press < **Esc** > from any option line.

Review the Quick Start Configurator menu, if you do not need to change the default settings, you can exit the Quick Start Configurator now, and go to the "Operation" section to begin emulation.

STEP 2

Select the PC Display Type: Position the cursor over *PC Display Type*. Press < **Left Arrow** > or < **Right Arrow** > to view your options:

Monochrome
Color
Composite
AST-5250
AST-Preview I/O
EGA Mono
EGA Color
VGA Mono
VGA Color

When the option you want appears, press < **Down Arrow** > to configure *Keyboard Type*.

STEP 3

Select the *Keyboard Type*: Press < **Left Arrow** > or < **Right Arrow** > to view your options:

USA
World Trade

When the option you want appears, press < **Down Arrow** > to configure *Window Address*.

STEP 4

Select the *window (shared memory) address*: Press < **Left Arrow** > or < **Right Arrow** > to change the default window address if your PC has features installed using this address (default address is 0D000h).

When the option you want appears, press < **Down Arrow** > to configure *Station Address*.

STEP 5

Select *station address 0 through 6*: Position the cursor over the *Station Address* you want changed. Press < **Left Arrow** > or < **Right Arrow** > to view your options.

Quick Start can configure up to three parallel printer ports. After you assign all three parallel printer ports Quick Start cannot configure any more printer stations. If you reconfigure an existing printer station as a display station or *Not Used*, then you can configure other printer stations.

If the full configuration program has been previously used to configure a printer station, Quick Start allows changes only if the printer model is a 5224-1, 5225-1, 5256-3, or 5219-1. Similarly, PC printers must be parallel and Epson™ to allow Quick Start changes.

Assign printer port designations (LPT1, LPT2, or LPT3) from the lowest station address to the highest. This applies to all parallel printer types you configure using Quick Start or the full configuration program.

The lowest display station address configured has IBM API compatibility.

NOTE

The PC printer is automatically configured as an Epson.

If you do not have the Enhanced AST-5251/11 Plus option installed, you can configure only one display station and five printer stations.

Check with your host system administrator for correct station addresses. The following options are available:

For AST-5251/11 Plus configuration:

Not Used
5251/11 Display
3180 Display
5224 Printer
5225 Printer
5256 Printer
5219 Printer

For master cluster configuration:

Not Used
5251/11 Display
3180 Display
Cluster Display
5224 Printer
5225 Printer
5256 Printer
5219 Printer
Cluster Printer

You can allocate cluster displays and printers for use by a slave cluster. If you select *Cluster Display*, the host display type defaults to 5251. If you select *Cluster Printer*, the host printer type defaults to 5224.

Refer to the *AST-5250/Cluster User's Manual* for cluster hardware setup.

For gateway configuration:

Not Used
5251/11 Display
3180 Display
Gateway Display
5224 Printer
5225 Printer
5256 Printer
5219 Printer
Gateway Printer

You can allocate gateway displays and printers for use by a slave gateway. If you select *Gateway Display*, the host display type defaults to 5251. If you select *Gateway Printer*, the host printer type defaults to 5224.

Refer to the *AST-5250/Gateway User's Manual* for gateway hardware setup.

STEP 6

Exit the program: Press **<Down Arrow>** to select *Exit Program* and press **<Enter>**. You can also press **<Esc>** from any option line. The following prompt appears:

Would you like to save this configuration ([Y]/N)?

Type **Y** (yes) or **N** (no) and press **<Enter>**.

Go to the next section to begin emulation.

OPERATION

Before you begin, make sure you are in your emulation software directory (*directory name*).

STEP 1

Begin Emulation: Enter the following command at the DOS prompt to begin emulation (if you are running from floppy disk, insert disk 1 of 2):

AST5251 <Enter>

STEP 2

Specify Systems Request:

If you are connected to a System/34:

Press **<Shift>-<F1>-<Caps Lock>** to obtain a sign-on screen.

If you are connected to a System/36 or 38:

A sign-on screen displays, if the System Available (SA) indicator is on.

You can now use your PC as a personal computer or an IBM 5250 display station. Use the hot-key sequence **<Alt>-<Esc>** or **<Left Shift>-<Right Shift>** to switch back and forth between emulation and PC session.

Using the Keyboard

Most of the keys on the AST Premium/286™, PC, PC AT, and Enhanced keyboards function like typewriter keys. You can use them to key in alphanumeric information. These keys have the same labels, locations, and function as their equivalents on an IBM 5250 keyboard. They also function in emulation mode just as they do in standard DOS mode.

Other keys, however, have special functions -- for deleting data or moving the cursor (refer to the keyboard template that came with your product). When your PC is in emulation mode, you can remap these special keys to function as keys that are unique to the IBM 5250 keyboard. Remapping alters the standard PC keyboard functions to emulate IBM 5251/11 keyboard functions.

The emulation program defaults to the 5250 keyboard type. To select a different keyboard type, execute ASTKBD.BAT (the DOS batch file that enables you to select the country type keyboard file to be used).

Refer to your *AST-5250/Emulation Program Base Manual* for keyboard type illustrations. They are labeled to show which keys are remapped to emulate IBM 5250 keys.

Using the Hot-Key Sequence

Standard Hot Key

AST-5251/11 enables your PC to emulate an IBM 5250 display station. You can operate your emulation software in emulation mode while using a standard DOS application program in DOS mode.

Press **<Left Shift>-<Right Shift>** to toggle between DOS and emulation modes. Pressing **<Left Shift>-<Right Shift>** once makes emulation the background mode and DOS the foreground mode -- pressing it again returns emulation to the foreground and DOS to the background.

NOTE

Do not switch from DOS to emulation mode while the drive light is on, you can damage files being read or saved.

Direct Access Hot Key

The direct access hot-key sequence takes you directly to the session you want. Press and hold **<Alt>**, select a session by pressing the number pad key that corresponds to the session you want. This hot-key sequence is available in emulation mode only.

Round-Robin Hot Key

The round-robin hot-key sequence takes you sequentially through the available sessions, starting at the current session. After the highest session number, it takes you to DOS, and from DOS it takes you back to emulation at the lowest session number. To do this, press **<Alt>-<Esc>**.

Refer to the *AST-5250/Emulation Program Base Manual* for more information on using hot-key sequences.

Terminating Emulation Mode

You must be in emulation mode to terminate emulation. Press **<Ctrl>-<Alt>-** to display the termination menu. The termination menu asks you to confirm that you want to terminate the session.

For more details on terminating emulation refer to the *AST-5250/Emulation Program Base Manual*.

Using the Printer

To provide printer support for both the host system environment and the PC environment, AST-5251/11 stops the host system from sending additional printer data and gives control of the printer to DOS. This printer support is available through the Printer Emulation menu. You can display the Printer Emulation menu if you have configured a printer session using the User Function menu or by hot keying to that session. Press **<Alt>-<Left Shift>** to display the User Function menu.

Refer to the *AST-5250/Emulation Program Base Manual* for detailed instructions on using the Printer Emulation menu and User Function menu for printer emulation.

NOTES



